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EXAMINER

HASSAN, RASHEDUL

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/605,870	Applicant(s) GRAVINA ET AL.	
	Examiner Rashedul Hassan	Art Unit 2179	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 November 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 12-37 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 12-37 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|-------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>See Continuation Sheet</u> . | 6) <input type="checkbox"/> Other: _____ |

Continuation of Attachment(s) 3). Information Disclosure Statement(s) (PTO/SB/08), Paper No(s)/Mail Date :12/30/04, 2/11/05, 2/14/05, 7/20/05, 8/19/05, 9/9/05, 1/13/06, 2/13/06, 2/21/07.

DETAILED ACTION

This communication is responsive to the preliminary amendment filed on 11/07/2006.

Claims 1-11 have been cancelled by the applicant.

Claims 12-37 are currently pending in this application.

Specification

The amendment filed on 11/7/2006 is objected to under 35 U.S.C. 132(a) because it introduces new matter into the disclosure. 35 U.S.C. 132(a) states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows:

The summary of invention has been amended to recite,

"The media content is indexed by segments for presentation. Each segment of media content is identified by an index location such that the segment of media content may be presented based on identification of its respective index location ([0012])."

The original disclosure mentions of media content stored in segments, but does not specify that the media contents are indexed by segments or presenting the media content based on identification of its respective index location.

Applicant is required to cancel the new matter in the reply to this Office Action.

The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required:

Claims 12, 15, 29-30 and 32 recites either "hierarchical relationships" or "hierarchy" for which there is no antecedent basis found in the specification.

The disclosure is also objected to because of the following minor informalities:

Line 1 in [0044] of the disclosure recites "**In** should be noted" that should be corrected to recite, "**It** should be noted".

Line 10 in [0045] of the disclosure recites "respective switches **151**, 172" that should be corrected to recite "respective switches 152, 172".

Line 4 in [0049] of the disclosure recites "switch **142**" that should be corrected to recite "switch **152**".

Line 7 in [0051] of the disclosure recites "base structure **160**" and "structure 150, **160**" that should be corrected to recite "base structure **170**" and "structure 150, **170**" respectively.

Line 2 in [0053] of the disclosure recites "FIGS. 8 and **11**" that should be corrected to recite "FIGS. 8 and **10**".

Line 2 in [0062] of the disclosure recites "includes **is** a collection" that should be corrected to recite, "includes a collection".

Line 3 in [0070] of the disclosure recites "reference to **the** a command" which should be corrected to recite "reference to a command".

Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 12-37 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The summary of invention has been amended to recite,

"The media content is indexed by segments for presentation. Each segment of media content is identified by an index location such that the segment of media content may be presented based on identification of its respective index location ([0012])."

The original disclosure mentions of media content stored in segments, but does not specify that the media contents are indexed by segments or presenting the media content based on identification of its respective index location.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 12-37 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding independent claims 12, 15, 32 and 36, the phrase "may be" renders the claims indefinite because it is unclear whether the limitation(s) following the phrase are part of the claimed invention. See MPEP § 2173.05(d). Claims depending from the respective independent claims are therefore also rejected for being indefinite.

Claim 29 furthermore recites the limitation "said machine readable medium containing the media content" in line 1-2. There is insufficient antecedent basis for this limitation in the claim. The claim has been interpreted to mean, "a machine readable medium containing the media content" for further prosecution.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 12-13, 15-19, 21-25, 30-35 are rejected under 35 U.S.C. 102(e) as being unpatentable over Kavanagh (US 2004/0054826 A1).

For claim 12, Kavanagh teaches a media presentation system, comprising,

(a) a host system (100 and 101 in Fig. 1) for presenting media content (audio/visual clips and other content which represent portions of a multimedia presentation of game play, [0014]), said host system including a machine readable medium (DVD disc 106 in Fig. 1) containing the media content indexed by segments for presentation (navigation of media segments is accomplished by selecting menu options represented by a DVD map, therefore, the menus constitute an index of the media segments of the DVD; see Fig. 3, [0024-0025], [0029], and [0039]), each said segment of media content being identified by an index location such that said segment of media content may be presented based on identification of its respective index location (each menu option constitutes an index location, wherein each menu option is associated with a specific media segment, [0039]); and

(b) an apparatus for controlling presentation of the media content by said host system, said apparatus comprising,

(i) a removable user interface (RUI) comprising at least one user input (the plastic overlays and the memory device 104 of Fig. 1 together make up a removable user interface comprising at least one user input since keys 804 of keyboard 206 are visually configurable by the use of plastic overlays which

specify functions of overlaid keys in the context of the game represented by program 302 contained in memory device 104, [0022]),

(ii) machine readable medium (104 in Fig. 1) containing software that is specific to the media content (Fig. 3 shows 104 containing software 301 and 302 specific to the media content, [0024] – [0026]),

(iii) machine readable medium containing a library of codes for communicating to said host system, in a protocol of said host system, commands relating to presentation of the media content, wherein said machine readable medium containing said library of codes is separate from said machine readable medium of (b)(ii) containing said software specific to the media content (ROM 203 or RAM 205 in Fig. 2, [0017] and [0019]), and

(iv) a controller, said RUI removably attached to said controller, said controller comprising,

(A) a processor (201 in Fig. 2), and

(B) machine readable medium containing a program (operational program of game control unit 103 ([0018]) together with Memory Card Reader 209 in Fig. 2) for reading said software ([0020]) and, based thereon (e.g., based on the read software 301 and 302 of Fig. 3), determining one or more codes (typical remote control codes comprising codes enabling up, down, left or right navigation to identify a menu option, [0029]) of said library for communicating to said host system ([0017]);

(c) wherein said program executed by said processor performs a method comprising the steps of,

(i) reading said software specific to the media content ([0020]),

(ii) based on said read software, causing to be communicated, in a protocol of said host system, one or more of said codes of said library to said host system in response to actuation of said user input ([0017-0021]), said one or more of said codes specifying the identification of an index location (a menu option) of a specific said segment of media content for presentation whereby said specific segment of media content may be presented irrespective of any hierarchical relationships between said segments of media content (although Kavanagh states that the DVD map 301 is a navigation map specifying hierarchical relationships between various chapters of the media content stored on DVD 106 ([0020]), he also teaches an implementation of a quiz game (Fig. 5), wherein based on the instructions within the software in 104, a random number is generated by CPU 201 when a user input selecting the number of players is received. This random number is used to generate one or more directional remote control codes specifying the identification of a specific invisible menu button. However, since the invisible menu button is associated with a specific question clip (media content), specifying the identification of the menu button is same as indirectly specifying the identification of the media content associated with the menu button. Since, the selection is based on

the random number, the selection is irrespective of any hierarchical relationships between said question clips used to display the menu itself, [0039]. In other words, presentation of the question clips does not necessarily follow the menu options beginning from the first/top question clip to the next question clip in the hierarchy).

For claim 13, Kavanagh further teaches that the machine readable medium containing the software specific to the media content is part of the RUI (since the RUI is interpreted to comprise both the plastic overlay and the memory device 104 containing the software 301 and 302 as shown in Fig. 3).

Claim 15 is similar in scope to claim 12, therefore rejected under the same rationale as claim 12.

For claim 16, Kavanagh teaches that said machine readable medium of (c) containing said library of codes (ROM 203 or RAM 205 in Fig. 2, [0017] and [0019]) comprises said machine readable medium of (d)(ii) containing said program (operational program of game control unit 103 ([0018]) together with Memory Card Reader 209 in Fig. 2) since both the library of codes and the program are stored at least in the RAM 205 during execution.

For claim 17, Kavanagh further teaches that the codes of the library represent button pressed of a remote controller of the media device ([0029]-[0030]).

For claim 18, Kavanagh further teaches that the library of codes comprises a library of infrared codes for various consumer electronic devices, the infrared codes representing remote controller button presses of respective remote controllers of the various consumer electronic devices ([0018-0020], [0025], [0027], [0029-0030] and [0037]).

For claim 19, Kavanagh further teaches that the library of codes further comprises transmission protocols for communicating the codes to various consumer electronic devices via infrared signals ([0017], [0023], [0025-0026], [0030], and [0054]).

For claim 21, Kavanagh further teaches that the step of reading the software by the program comprises processing data that is specific to the media content (301 in Fig. 3, [0018-0026], [0029-0031] and [0037]).

For claim 22, Kavanagh further teaches that the step of reading the software by the program comprises executing a program that is specific to the media content (302 in Fig. 3, [0018-0026], [0029-0031] and [0037]).

For claim 23, Kavanagh further teaches that the machine readable medium of (b) containing the software specific to the media content comprises a memory component of the RUI (104 in Fig. 1 is a memory device, [0015]).

For claim 24, Kavanagh teaches that the machine readable medium of (c) containing the library of codes comprises a memory component of the controller (ROM 203 or RAM 205, [0017] and [0019]).

For claim 25, Kavanagh further teaches that the machine readable medium of (d)(ii) containing the program (operational program of game control unit 103 ([0018]) together with Memory Card Reader 209 in Fig. 2) comprises the machine readable medium of (c) containing the library (ROM 203 or RAM 205 in Fig. 2, [0017] and [0019]) since both the library of codes and the program are stored at least in the RAM 205 during execution.

For claim 30, Kavanagh further teaches that the predefined hierarchy comprises a DVD map (Fig. 3, [0025]).

For claim 31, Kavanagh further teaches that said one or more of said codes of said step (e)(ii) consists of a plurality of codes ([0018-0026], [0029-0031] and [0037]).

Art Unit: 2179

Claim 32 is similar in scope as claim 12 except for explicitly narrowing the scope of the host system to consist of a DVD player and a DVD. Since Kavanagh also teaches a host system consisting of a DVD player and a DVD, the claim is also rejected under the same rationale as claim 12.

For claim 33, Kavanagh further teaches that the library includes codes for respectively communicating to any one of a plurality of different DVD players, in a respective protocol of each DVD player, wherein the library includes codes for communicating to another, different DVD player, in a specific protocol of the other DVD player, commands relating to presentation by the other DVD player of the media content of the particular DVD when received therein (Figs. 1 and 3; [0018-0020] and [0025]; CPU 201 determines the specific model of DVD player 101 and retrieves the current IR Code configuration; moreover, memory device 104 contains code and a DVD map which communicates with the DVD player to extract DVD media content).

For claim 34, Kavanagh further teaches that the library includes codes for respectively communicating to any one of a plurality of different DVD players, in a respective protocol of each DVD player, commands relating to presentation by the respective DVD player of the media content of the particular DVD when received therein ([0018-0020] and [0025]).

For claim 35, Kavanagh further teaches that the software specific to the media content of the particular DVD is independent of the particular DVD player by which the media content of the particular DVD is presented (Fig. 1; 104 is dependent on 106 but independent of 101).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 14, 20, 26-28, and 36-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kavanagh (US 2004/0054826 A1).

For claims 14 and 20, Kavanagh does not explicitly teach that the machine readable medium (104 in Fig. 2 and 3) containing said software (301 and 302 in Fig. 3) specific to the media content comprises a script written for the media content, and wherein said program (operational program of game control unit 103 ([0018]) together with Memory Card Reader 209 in Fig. 2) of said controller comprises an interpreter of said script. Kavanagh simply teaches that through memory card reader 209, CPU 201 accesses data stored on memory device 104. This data contains a code 302 (FIG. 3) and a DVD map 301 which are specific to DVD 106. Code 302 is a computer program which includes computer instructions and data which specify a behavior of game control unit 103 ([0020]). Code 302 of memory device 104 contains computer instructions and/or data which collectively define a program for execution by CPU 201 of game control unit 103 ([0026]). In short, Although Kavanath teaches executing the code 302 written for the media content by the CPU 201, Kavanagh does not explicitly teach that the code 302 is a "script" and that the CPU 201 "interprets" the code 302 using an "interpreter". In light of the specification, an interpreter is a program run by the processor for interpreting the script ([0052]). The term "interpreter" and "interpreting" has special meaning in programming. An "interpreter" is a program, which executes other programs. This is in contrast to a compiler, which does not execute its input program (the "source code") but translates it into executable "machine code" (also called "object code") which is output to a file for later execution. It may be possible to execute the same source code either directly by an interpreter or by compiling it and then executing the machine code produced. Official notice is taken that executing

instructions using scripting language and a script interpreter was well known in the art at the time of the invention. Therefore, it would have been obvious to a person of ordinary skill in the art to modify Kavanagh to implement the code 302 in any scripting language and execute that code using a corresponding script interpreter motivated by alternative implementation preference.

For claims 26 and 27, Although Kavanath teaches indexing the media content by chapters (see Fig. 3, [0047-0048]), he does not explicitly disclose that the media content is indexed by time or titles. Official notice is taken that indexing media content by time or title was well known in the art at the time of the invention. Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention to modify Kavanagh to include indexing media content by time or title in order to provide alternative navigational mechanism for the media content.

Claim 28 is similar in scope to claim 12 except for the recitation of the limitation that states "the communication of one or more of said codes resulting in presentation of a said segment of media content **without specifying an index location of said segment of media content** that is presented" (emphasis added). Kavanagh teaches that in a preferred embodiment, game control unit 103 can also function as a universal remote control to control DVD player 101 in a conventional manner ([0027]). He also depicts a conventional universal remote control in Fig. 7 which shows conventional remote control buttons such as play, skip, fast reverse, fast forward for media playback

(see also [0044]). Nevertheless, he does not explicitly show or describe that his game control unit 103 incorporates these conventional remote control functionalities (see [0045-0050]). Still based on the teaching that the game control unit 103 can also function as a universal remote control to control DVD player 101 in a conventional manner, it would have been obvious to incorporate the play, skip, fast forward, fast rewind, previous chapter, next chapter etc. conventional remote control command codes into his invention in order to present segments of media content without specifying an index location of said segment of media content. The motivation for such combination would have been extend the functionality of the game control unit 103 to also emulate a conventional remote control in every aspect ([0027]).

Claim 36 is similar in scope as claim 12 up to and including the limitation (c)(ii), therefore Kavanagh teaches these limitations as already discussed in the rejection of claim 12 hereinabove. The additional limitations (d)(i)-(iii) recites limitations that are similar to claims 14 and 20. Therefore, claim 37 is rejected for being obvious under the same rationale as claims 14 and 20.

For claim 37, Kavanagh teaches a plurality of different computer readable media each respective computer readable medium containing a code specific to respective, different media content (code 302 and a DVD map 301 which are specific to DVD 106, [0020]). He does not teach that the code is a "script" and that the controller contains an "interpreter" for reading and interpreting each of the scripts from the computer readable

Art Unit: 2179

media. However, since these limitations are similar to claims 14 and 20, the claim is rejected for being obvious under the same rationale as claims 14 and 20.

Claim 29 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kavanagh in view of Sampson et al. (US 2003/0030852 A1) hereinafter Sampson.

For claim 29, Kavanagh teaches a machine readable medium containing the media content (DVD 106 in Fig. 1) further contains data predefining a hierarchy of said segments of media content (menu/index represented by the DVD map which is also included in DVD 106, [0025] and [0029]). But Kavanagh does not teach wherein said index location (menu option) specified by said plurality of said codes in step (e)(ii) is specified without regard to said predefined hierarchy since the index location specified by said plurality of said codes is specified using typical remote control codes enabling up, down, left or right navigation to identify a menu option within a menu that is hierarchically organized (see [0020] and [0029]). This is because, according to Kavanagh, interactive game play through game control unit 103 is effected, at least in part, by directing playback of multimedia clips of DVD 106 by emulation of remote control signals to DVD player 101 and generally, he mentions, a remote control does not provide any mechanism by which a user can directly specify a particular clip of multimedia content of a DVD for playback. Kavanagh acknowledges that such limited capabilities of a typical remote control pose challenging problems for the interactive use of DVD content as disclosed. He specifically mentions the challenges to be initial

synchronization and maintaining synchronization between the DVD player 101 and the game control unit 103. He uses base unit 102 to convert the RF signal emitted by the remote unit 103 into an IR signal that the standard DVD player unit 101 can understand in order to overcome these challenges. However, it would have been more efficient to avoid these challenges altogether by avoiding the relative navigation of the DVD content using the typical directional navigation (up, down, left or right movement of a cursor) of a remote control in a menu environment in the first place. Sampson teaches indexing a digital visual recording content in a manner that facilitates identification of the digital visual recording content and/or navigation through the digital visual recording content ([0019]). He teaches indexing the digital visual content by segments, wherein each segment is represented by a keyframe and identified by an index location (keyframe number or other indicia, [0031]) to facilitate presentation of the digital video content in several ways. One such way is to use the numeric keypad of a remote control apparatus to directly specify the keyframe number or other indicia (e.g., the index location) without regard to any hierarchical relationships between the keyframes. Therefore, it would have been obvious to a person of ordinary skill in the art to modify the invention disclosed by Kavanagh by this technique taught by Sampson to directly select a content segment using the remote control code specifying the identification of an index location of a specific segment of media content for presentation without regard to any hierarchical relationship. The motivation for such combination would have been to solve the relative DVD navigation problem taught by Kavanagh and thereby avoiding the problem with synchronization.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rashedul Hassan whose telephone number is 571-272-9481. The examiner can normally be reached on M-F 7:30AM - 4PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Weilun Lo can be reached on 571-272-4847. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



(Rashedul Hassan)



WEILUN LO
SUPERVISORY PATENT EXAMINER